

June 28, 1982

DOCUMENTATION RECORDS  
FOR  
HAZARD RANKING SYSTEMPesticide Lab -  
Yakima

INSTRUCTIONS: The purpose of these records is to provide a convenient way to prepare an auditable record of the data and documentation used to apply the Hazard Ranking System to a given facility. As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference that will make the document used for a given data point easier to find. Include the location of the document and consider appending a copy of the relevant page(s) for ease in review.

FACILITY NAME:

U.S. Dept. of Agriculture Laboratory

LOCATION:

Yakima, Wa. 98902  
3706, West Nob Hill Blvd.VPLSF  
1.4

USEPA SF



1599748

GROUND WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected (5 maximum):

*None*

Rationale for attributing the contaminants to the facility:

*None*

\* \* \*

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifers(s) of concern:

*Sand and gravel water table aquifer*

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

*< 20ft average about 15 feet.*

Depth from the ground surface to the lowest point of waste disposal/storage:

*< 10ft*

### Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

*Oct/Mar  $\approx$  6.8" 3.6" of precip in Yakima falls as snow (36" of snow)*

Mean annual lake or seasonal evaporation (list months for seasonal):

*Oct/Mar evaporation low: Note average monthly temps and relative humidity.*

Oct	Nov	Dec	Jan	Feb	Mar	
60°	$\pm$ 45°	35-40°	25-30°	35°	50°	Temp.
65%	70%	85%	90%	80%	70%	Relative Humidity

Net precipitation (subtract the above figures):

*Net infiltration probably 4-5" per year during winter months (Bill Weller, SCS, Hydrologist, Spokane)*

### Permeability of Unsaturated Zone

Soil type in unsaturated zone:

*Sandy gravelly loam (well logs DOE files)*

Permeability associated with soil type:

*High*

### Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

*Liquids (Dr Eric Halfhill U.S.D.A. Yakima).*

\* \* \*

3 CONTAINMENT

Containment *None*

Method(s) of waste or leachate containment evaluated:

*Disposal to septic tank drain field*

Method with highest score:

*As above*

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

*Chlorinated pesticides (DDT etc)*

Compound with highest score:

*DDT*

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

*Minimum of 1-40 bbls of wash water and formulated pesticide mixtures*

Basis of estimating and/or computing waste quantity:

*Phone conversation DR ERIC Halfhill U.S. DA. 7/30/82*

\* \* \*

5 TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Drinking water      DOE files - Water rights, public water supplies  
Irrigation      DOE files - water rights

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

Robert Barry well Logan Ave. SW  $\frac{1}{4}$  of SE  $\frac{1}{4}$  Sec 27 T13N R 18E W.M.  
City of Yakima Airport well Sec 35 7500 ft from site (DOE files)

Distance to above well or building:

About 2000 ft for Barry well.

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

> 50,000 (City of Yakima)  
 $\approx$  5000 (Nob Hill Water Co)

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

< 200 acres (DOE water rights)

Total population served by ground water within a 3-mile radius:

> 50,000

SURFACE WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

*None*

Rationale for attributing the contaminants to the facility:

*None*

\* \* \*

2 ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

*< 3% (U.S.G.S. Yakima West Quad. map)*

Name/description of nearest downslope surface water:

*Wide Hollow Creek*

Average slope of terrain between facility and above-cited surface water body in percent:

*< 3%*

Is the facility located either totally or partially in surface water?

*No.*

Is the facility completely surrounded by areas of higher elevation?

No

1-Year 24-Hour Rainfall in Inches

0.9" 38% of 2 yr 24 HR Rainfall (NOAA Atlas 2).

Distance to Nearest Downslope Surface Water

2000 ft

Physical State of Waste

Liquid (Dr Eric Halfhill, U.S.DA. Yakima).

\* \* \*

### 3 CONTAINMENT

Containment None

Method(s) of waste or leachate containment evaluated:

Disposal into septic tank drain field

Method with highest score:

As above

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

DDT

Compound with highest score:

DDT

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

Estimated at Not more than 40 bbls - (Conversation with Dr Eric Halfhill)

Basis of estimating and/or computing waste quantity:

Conversation with Dr Eric Halfhill U.S.D.A. - 7/30/82

\* \* \*

5 TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

Irrigation



Is there tidal influence?

NO

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

NONE

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

NONE

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

None

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

None for drinking water.

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

480 acres S4 00699A Water right NE $\frac{1}{4}$  of SE $\frac{1}{4}$  Section 35  
18 acres S4 00511A " SE $\frac{1}{4}$  SW $\frac{1}{4}$  SE $\frac{1}{4}$  Sec 36

Total population served:

$\equiv$  750 people

Name/description of nearest of above water bodies:

Wide Hollow Creek.

Distance to above-cited intakes, measured in stream miles.

$\approx$  8000 ft.

AIR ROUTE

1 OBSERVED RELEASE

Contaminants detected:

*None*

Date and location of detection of contaminants

Methods used to detect the contaminants:

Rationale for attributing the contaminants to the site:

\* \* \*

2 WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Most incompatible pair of compounds:

Toxicity

Most toxic compound:

Hazardous Waste Quantity

Total quantity of hazardous waste:

Basis of estimating and/or computing waste quantity:

\* \* \*

3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi	0 to 1 mi	0 to 1/2 mi	0 to 1/4 mi
-----------	-----------	-------------	-------------

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

Distance to critical habitat of an endangered species, if 1 mile or less:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?